



PATENT ABSTRACTS OF JAPAN

(11) Publication number: 07071356 A

(43) Date of publication of application: 14.03.1995

(51) Int. Cl. F02P 15/08

F02P 15/08, F02D 41/04, F02P 5/15

(21) Application number: 05239130

(22) Date of filing: 31.08.1993

(71) Applicant: MAZDA MOTOR CORP

(72) Inventor: YAMAMOTO HIROYUKI

KUDO HIDETOSHI

OOTA MUNETAKI

INAME TSUTOMU

KIRIKI YOSHIHIRO

(54) COMBUSTION CONTROLLER OF ENGINE

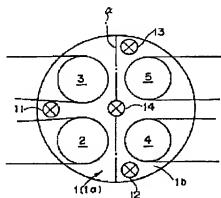
(57) Abstract:

PURPOSE: To reduce the torque shock when the number of ignition plug to be actuated is changed without much increase of the load in the control system.

CONSTITUTION: One central ignition plug 14 which is stopped to run in a specified stopping area is arranged around the center of a combustion chamber and three peripheral ignition plugs 11-13 are arranged to be always actuated at the outer peripheral part of the combustion chamber. When the central ignition plug 14 is changed over from the suspended state to the actuated state, the ignition time is all at once changed and at the same time the air-fuel ratio and the fuel injection time are changed at a stroke besides. The ignition time stored in a map is set as a delayed angle than a requested ignition time so as to reduce the torque shock at the time of changing-over. For another in-

stance, only the ignition time of the peripheral ignition plugs is moderated on changing over the central ignition plug or the ignition time of the central ignition plug can be moderated by regarding the moderated ignition time of the peripheral ignition plugs as an aimed figure.

COPYRIGHT: (C)1995,JPO



SONDERHOFF & EINSEL

Siemens AG
CT IP S AM
Postfach 22 16 34
80506 München
GERMANY

Shin-Marunouchi Center Bldg., 18th/19th Fl.
6-2, Marunouchi 1-chome
Chiyoda-ku, Tokyo 100-0005

Mail: Central P.O.Box 900, Tokyo 100-8692
TEL: 81 3 5220 6500
FAX G3: 81 3 5220 6556
FAX G4: 81 3 5220 6530
E-mail: patent@sonderhoff-einsel.co.jp

Tokyo, den 22. August 2007

Ihr Zeichen: 2002P01381WOJP

Unser Zeichen: 767E W/Hn

PRÜFUNGSBESCHEID

Japanische Patentanmeldung
Nr. 2004-536845

Anmelder: Siemens Aktiengesellschaft

Sehr geehrte Damen und Herren,

in obiger Sache ist jetzt ein **Amtsbescheid ergangen**, der in der Übersetzung wie folgt lautet:

(vgl. Anlage)

Zur **Beantwortung** dieses Bescheides kann bis zum 8. 10. 2007 Widerspruch eingereicht werden. Diese Frist ist **bis zu drei Monate verlängerbar**.

Bemerkungen:

Sofern eine Fristverlängerung möglich ist, werden wir dieselbe im Falle des Ausbleibens Ihrer Informationen ohne besonderen Auftrag beantragen. Bitte beachten Sie, daß Änderungen jeglicher Art an den Anmeldungsunterlagen ausschließlich innerhalb der für die Beantwortung von Amtsbescheiden gesetzten Fristen erfolgen können.

Wir fügen unsere Kostenrechnung die Bescheidsübermittlung betreffend bei und bitten um rechtzeitige Instruktionserteilung.

Mit freundlichen Grüßen
SONDERHOFF & EINSEL

Anlagen:

- 1 Bescheidsübersetzung / Bemerkungen
- 2 Formaldaten
- 1 Kostenrechnung

TRANSLATION OF THE OFFICIAL LETTER

Drafting Date: July 5, 2007

Dispatch Date: July 11, 2007

The invention according to Claims 1 - 7 cannot be patented in accordance with the provision of Article 29(2) of the Patent Law, since it is obvious on the basis of the disclosure of the following prior publications:

(Citations:)

1. JP Pat. Appln. Discl. No. 10-227239
2. JP Pat. Appln. Discl. No. 07-071356

(Examiner's Note:)

Concerning Claims 1 - 4, 7:

Citations 1 & 2

Citation 1 states that several fuel injection configurations are provided, a control map is set so that the engine control values are discontinued in the boundary of the injection configurations, and when the operating conditions are located near the boundary of the injection configuration, the engine control values are determined based on the grid points within the injection configuration area to which the operating conditions belong.

Citation 2 states that when several maps are provided, the determination of the control values based on a map is made by the extrapolation from the control values stored in other maps.

Concerning Claims 5, 6:

Citations 1 & 2

It is a well-known art before filing of the present application that a map for fuel control is set based on the load and speed.

(Citations:)

- (1) JP Pat. Appln. Discl. No. 10-227239 - August 25, 1998
Patent Application No. 9-29130 - February 13, 1997
Priority: None
Applicant: Mazda K.K., Hiroshima, Japan
Title: Engine control device
(Cited in the International Search Report.)
(See the corresponding EP 0,859,141.)
- (2) JP Pat. Appln. Discl. No. 7-71356 - March 14, 1995
Patent Application No. 5-239130 - August 31, 1993
Priority: None
Applicant: Mazda K.K., Hiroshima, Japan
Title: Combustion controller of engine

Neuregelung für das Beantragen von Fristverlängerungen

Für die Verlängerung von Fristen zur Beantwortung von Prüfungsbescheiden gilt ab **1. April 2007**:

Fristen sind jeweils um einen Monat, maximal bis zu 3 Monaten verlängerbar.

Pro Verlängerungsantrag fällt eine Amtsgebühr von JPY 2.100,- und eine Anwaltsgebühr von JPY 12.000,- an.

Mehrere Anträge können gleichzeitig eingereicht werden. Für jeden weiteren Antrag außer dem Ersten ermäßigt sich die Anwaltsgebühr um 50%.

SONDERHOFF & EINSEL

März 2007

Change in Procedure for Obtaining Extension of Term in Response to Official Letters

From April 1, 2007, the following procedure will be applied when requesting extensions of term in response to Official Letters:

Extension for one month only may be requested, up to the maximum time extension of 3 months.

Per application for extension, Official Fees of JPY 2,100.- and Agent's Fees of JPY 12,000.- become due.

Multiple applications for extension may be filed. For each additional application except for the first application for extension, Agent's Fees are reduced by 50%.

SONDERHOFF & EINSEL

March 2007